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**Fig. 1: Identification of genes involved in
Alzheimer's Disease pathology**

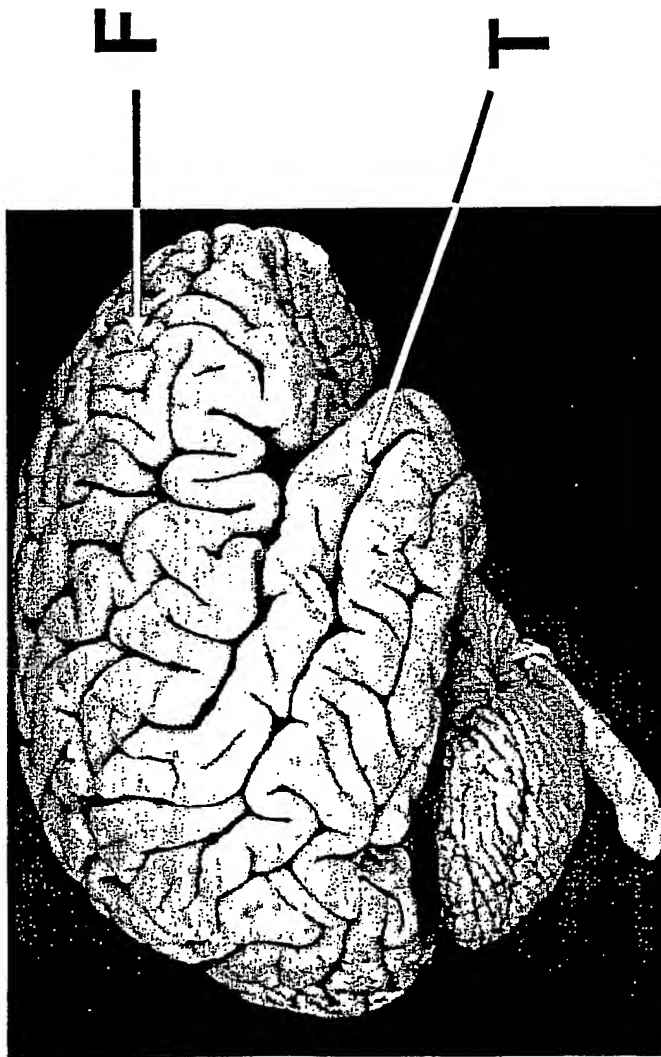
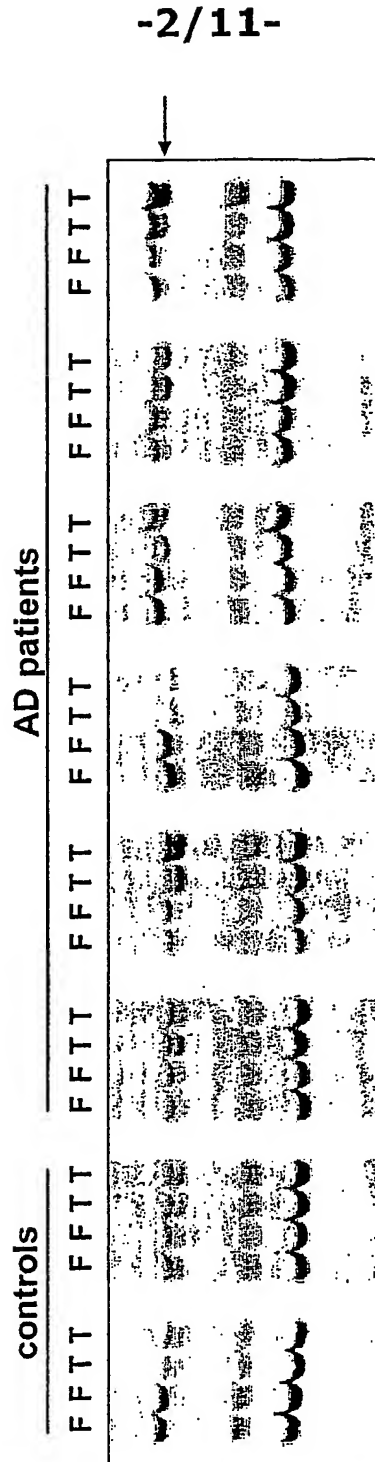
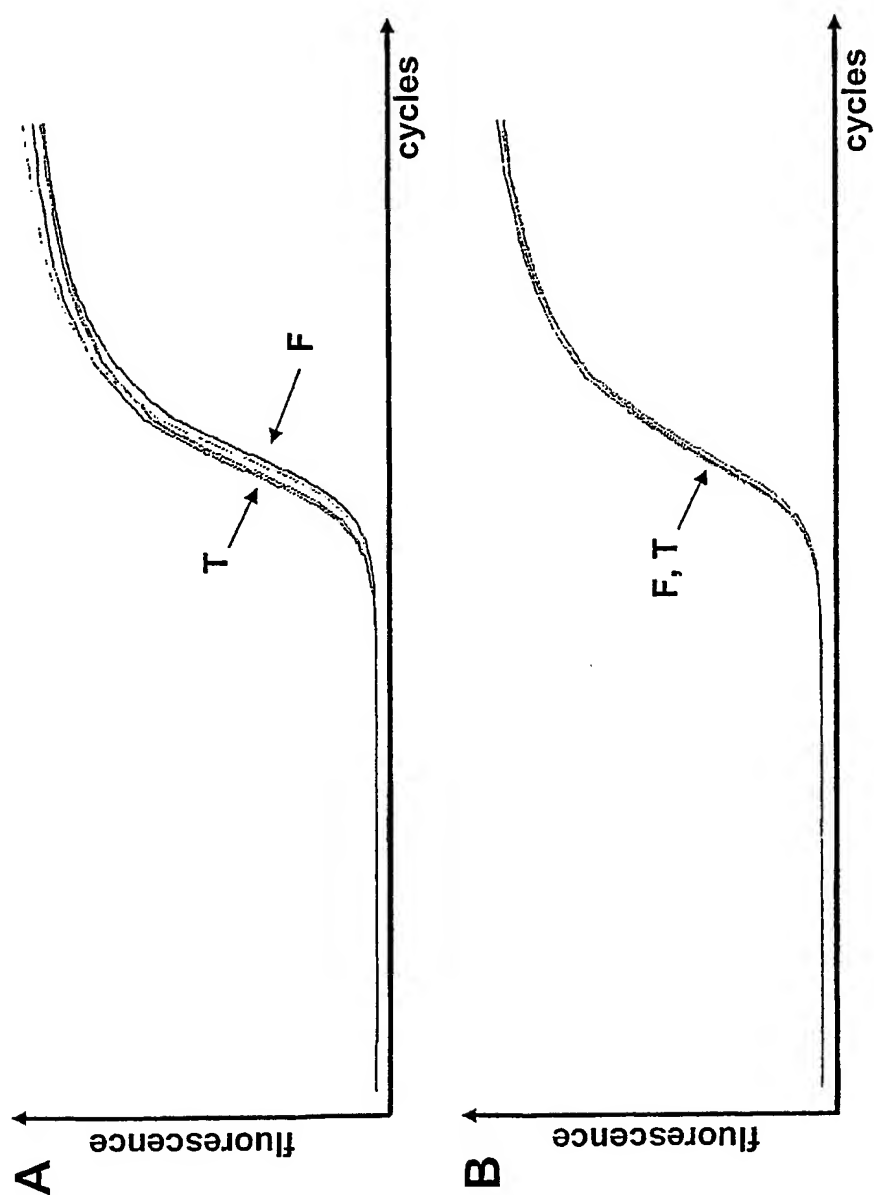


Fig. 2: Identification of differentially expression of the FOAP-13 gene by fluorescence differential display



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**Fig. 3: Differential expression of the foap-13 gene
as determined by RT-PCR analysis**



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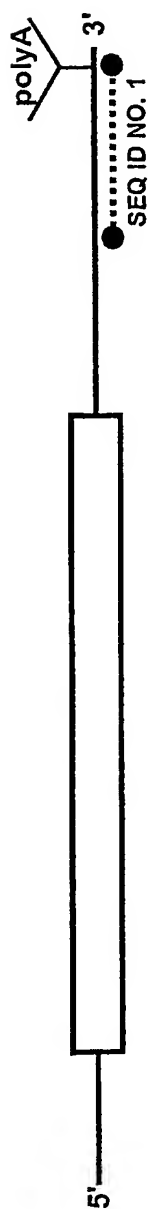
Fig. 4: SEQ ID NO. 1**Length: 390 bp**

```
1  TGGTTCCTGG CTCTCCCTCA AGAGTGCAGC CTTGGCTAGA GAACTCACAG
51  CTCTGGGAAA AAGAGGAGCA GACAGGGTTC CCTGGGCCCC GTCTCAGCCC
101 AGCCACTGAT GCTGGATGAC CTTGGCCTGA CCCTGGTCTG GTCTCAGAAT
151 CACTTTTCCC ATCTGTAAAA TTGAGATGAA TTTTGGTGTT GAAAGTTCTT
201 CCTGGAGCAG ATGTCCTAGA AGGTTTTAGG AATAGTGACA GAGTCAGGCC
251 ACCCCAAGGG CCATGGGAGC CAGCTGACCT GCTTGACCGA AGGATTTCTG
301 ACAGACTATC TTTGGGGATG TTTTCAAGAA GGGATATAAG TTATTTACTT
351 TGGGCATTTA AAAGAAAATT TCTCTCGGGA ATAATTTTAT
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**Fig. 5: Schematic alignment of SEQ ID NO. 1 with human FOAP-13 mRNA
(GenBank accession number AB028927)**



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**Fig. 6: Sequence alignment of SEQ ID NO.1 with
nucleotides 2213-2602 of human FOAP-13
cDNA (GenBank accession number AB028927)**

```
1  TGGTTCCTGGCTCTCCCTCAAGAGTGCAGCCTTGGCTAGAGAACTCACAG  50
   |||||||||||||||||||||||||||||||||||||||||||||||||
2213 TGCTTCCTGGCTCTCCCTCAAGAGTGCAGCCTTGGCTAGAGAACTCACAG  2262

      .
51  CTCTGGGAAAAAGAGGAGCAGACAGGGTTCCCTGGGCCCAGTCTCAGCCC  100
   |||||||||||||||||||||||||||||||||||||||||||||||||
2263 CTCTGGGAAAAAGAGGAGCAGACAGGGTTCCCTGGGCCCAGTCTCAGCCC  2312

      .
101 AGCCACTGATGCTGGATGACCTTGGCCTGACCCTGGTCTGGTCTCAGAAT  150
   |||||||||||||||||||||||||||||||||||||||||||||||||
2313 AGCCACTGATGCTGGATGACCTTGGCCTGACCCTGGTCTGGTCTCAGAAT  2362

      .
151 CACTTTTCCCATCTGTAAAATTGAGATGAATTTTGGTGTGAAAGTTCTT  200
   |||||||||||||||||||||||||||||||||||||||||||||||||
2363 CACTTTTCCCATCTGTAAAATTGAGATGAATTTTGGTGTGAAAGTTCTT  2412

      .
201 CCTGGAGCAGATGTCCTAGAAGGTTTTAGGAATAGTGACAGAGTCAGGCC  250
   |||||||||||||||||||||||||||||||||||||||||||||||||
2413 CCTGGAGCAGATGTCCTAGAAGGTTTTAGGAATAGTGACAGAGTCAGGCC  2462

      .
251 ACCCCAAGGGCCATGGGAGCCAGCTGACCTGCTTGACCGAAGGATTTCTG  300
   |||||||||||||||||||||||||||||||||||||||||||||||||
2463 ACCCCAAGGGCCATGGGAGCCAGCTGACCTGCTTGACCGAAGGATTTCTG  2512

      .
301 ACAGACTATCTTTGGGGATGTTTTCAAGAAGGGATATAAGTTATTTACTT  350
   |||||||||||||||||||||||||||||||||||||||||||||||||
2513 ACAGACTATCTTTGGGGATGTTTTCAAGAAGGGATATAAGTTATTTACTT  2562

      .
351 TGGGCATTTAAAAGAAAATTTCTCTCGGGAATAATTTTAT  390
   |||||||||||||||||||||||||||||||||||||||||||||||||
2563 TGGGCATTTAAAAGAAAATTTCTCTCGGGAATAATTTTAT  2602
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**Fig. 7: SEQ ID NO. 2;
amino acid sequence of the human FOAP-13
protein**

Length: 491 aa

```
1  MAGQGLPLHV ATLLTGILLEC LGFAGVLFGW PSLVFVFKNE DYFKDLCGPD
51  AGPIGNATGQ ADCKAQDERF SLIFTLGSMF NNFMTFPTGY IFDRFKTTVA
101 RLIAIFFYTT ATLIIAFTSA GSAVLLFLAM PMLTIGGILF LITNLQIGNL
151 FGQHRSTIIT LYNGAFDSSS AVFLIIKLLY EKGISLRASF IFISVCSTWH
201 VARTFLLMPR GHIPYPLPPN YSYGLCPGNG TTKEEKETAE HENRELQSKE
251 FLSAKEETPG AGQKQELRSF WSYAFSRRFA WHLVWLSVIQ LWHYLFITGL
301 NSLLTNMAGG DMARVSTYTN AFAFTQFGVL CAPWNGLLMD RLKQKYQKEA
351 RKTGSSTLAV ALCSTVPSLA LTSLLCLGFA LCASVPILPL QYLTFILQVI
401 SRSFLYGSNA AFLTLAFPSE HFGKLFGLVM ALSAVVSLQ FPIFTLIKGS
451 LQNDPFYVNV MFMLAILLTF FHPFLVYREC RTWKESPSAI A
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**Fig. 8: SEQ ID NO. 3;
nucleotide sequence of the human FOAP-13 cDNA**

Length: 2630 bp

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1   CGGACGCGTG GGC GGACGCG TGGGCGGACG CGTGGGCTCT GGGAGTGTGA
51  AACTGGGAGA GACGGTTAAG CTGGGGACGG TATTCAGAAT TCGAGCGCAG
101 GAGCTCCGCT TCTCCACCTG CTCCC GGGGA GCTATTGGGA TCCAGAGAAT
151 CACCCGCTGA TGGT TTTTCC CCAGGCCTGA AACCAACCAGA GAGCTACGGG
201 AAAGGAAGGG CTTGGCTTGC CAGAGGAATT TTCCAAGTGC TCAAACGCCA
251 GGCTTACGGC GCCTGTGATC CGTCCAGGAG GACAAAGTGG GATT TGAAGA
301 TCCACTCCAC TTCTGCTCAT GGC GGGCCAG GGCCTGCCCC TGCACGTGGC
351 CACACTGCTG ACTGGGCTGC TGGAATGCCT GGGCTTTGCT GCGTCTCTCT
401 TTGGCTGGCC TTCACTAGTG TTTGTCTTCA AGAATGAAGA TTACTTTAAG
451 GATCTGTGTG GACCAGATGC TGGGCCGATT GGCAATGCCA CAGGGCAGGC
501 TGACTGCAAA GCCCAGGATG AGAGGTTCTC ACTCATCTTC ACCCTGGGGT
551 CCTTCATGAA CAACTTCATG ACATTCCCCA CTGGCTACAT CTTTGACCGG
601 TTCAAGACCA CCGTGGCAGC CCTCATAGCC ATAT TTTTCT ACACCACCGC
651 CACACTCATC ATAGCCTTCA CCTCTGCAGG CTCAGCCGTG CTGCTCTTCC
701 TGGCCATGCC AATGCTCACC ATTGGGGGAA TCCTGTTTCT CATCACC AAC
751 CTGCAGATTG GGAACCTATT TGGCCAACAC CGTTCGACCA TCATCACTCT
801 GTACAATGGA GCATTTGACT CTTCCTCGGC AGTCTTCCTT ATTATTAAGC
851 TTCTTTATGA AAAAGGCATC AGCCTCAGGG CCTCCTTCAT CTTCATCTCT
901 GTCTGCAGTA CCTGGCATGT AGCACGCACT TTCCTCCTGA TGCCCCGGGG
951 GCACATCCCA TACCCACTGC CCCCCA ACTA CAGCTATGGC CTGTGCCCTG
1001 GGAATGGCAC CACAAAGGAA GAGAAGGAAA CAGCTGAGCA TGAAAACAGG
1051 GAGCTACAGT CAAAGGAGTT CCTTTCAGCG AAGGAAGAGA CCCCAGGGGC
1101 AGGGCAGAAG CAGGAACTCC GCTCCTTCTG GAGCTACGCT TTCTCTCGGC
1151 GCTTTGCCTG GCACCTGGTG TGGCTGTCTG TGATACAGTT GTGGCACTAC
1201 CTCTTCATTG GCACTCTCAA CTCCTTGCTG ACCAACATGG CCGGTGGGGA
1251 CATGGCACGA GTCAGCACCT ACACAAATGC CTTTGCCTTC ACTCAGTTTCG
1301 GAGTGCTGTG TGCCCCCTGG AATGGCCTGC TCATGGACCG GCTTAAACAG
1351 AAGTACCAGA AGGAAGCAAG AAAGACAGGT TCCTCCACTT TGGCGGTGGC
1401 CCTCTGCTCG ACGGTGCCTT CGCTGGCCCT GACATCCCTG CTGTGCCTGG
1451 GCTTCGCCCT CTGTGCCTCA GTCCCATCC TCCCTCTCCA GTACCTCACC
1501 TTCATCCTGC AAGTGATCAG CCGCTCCTTC CTCTATGGGA GCAACGCGGC
1551 CTTCCTCACC CTTGCTTTCC CTTCAGAGCA CTTTGGCAAG CTCTTTGGGC
1601 TGGTGATGGC CTTGTCGGCT GTGGTGTCTC TGCTCCAGTT CCCCATCTTC
1651 ACCCTCATCA AAGGCTCCCT TCAGAATGAC CCATTTTACG TGAATGTGAT
1701 GTTCATGCTT GCCATTCTTC TGACATTCTT CCACCCCTTT CTGGTATATC
1751 GGGAATGCCG TACTTGGA AAAGTCCCT CTGCAATTGC ATAGTTCAGA
1801 AGCCCTCACT TTTCAGCCCC GAGGATGGTT TTGTTTCATCT TCCACCACCT
1851 TTGAGGACCT CGTGTCCCAA AAGACTTTGC CTATCCCAGC AAAACACACA
1901 CACACACACA CACACACACA AAATAAAGAC ACACAAGGAC GTCTGCGCAG
1951 CAAGAAAAGA ATCTCAGTTG CCAAGCAGAT TGATATCACA CAGACTCAAA
2001 GCAAAGGCAT GTGGAACTTC TTTATTTCAA AACAGAAGTG TCTCCTTGCA
2051 CTTAGCCTTG GCAGACCCTT GACTCCAGGG GAGATGACCT GGGGGAGGAA
2101 GTGTGTCAAC TATTTCTTTA GGCCTGTTTG GCTCCGAAGC CTATATGTGC
2151 CTGGATCCTC TGCCACGGGT TAAATTTTCA GGTGAAGAGT GAGGTTGTCA

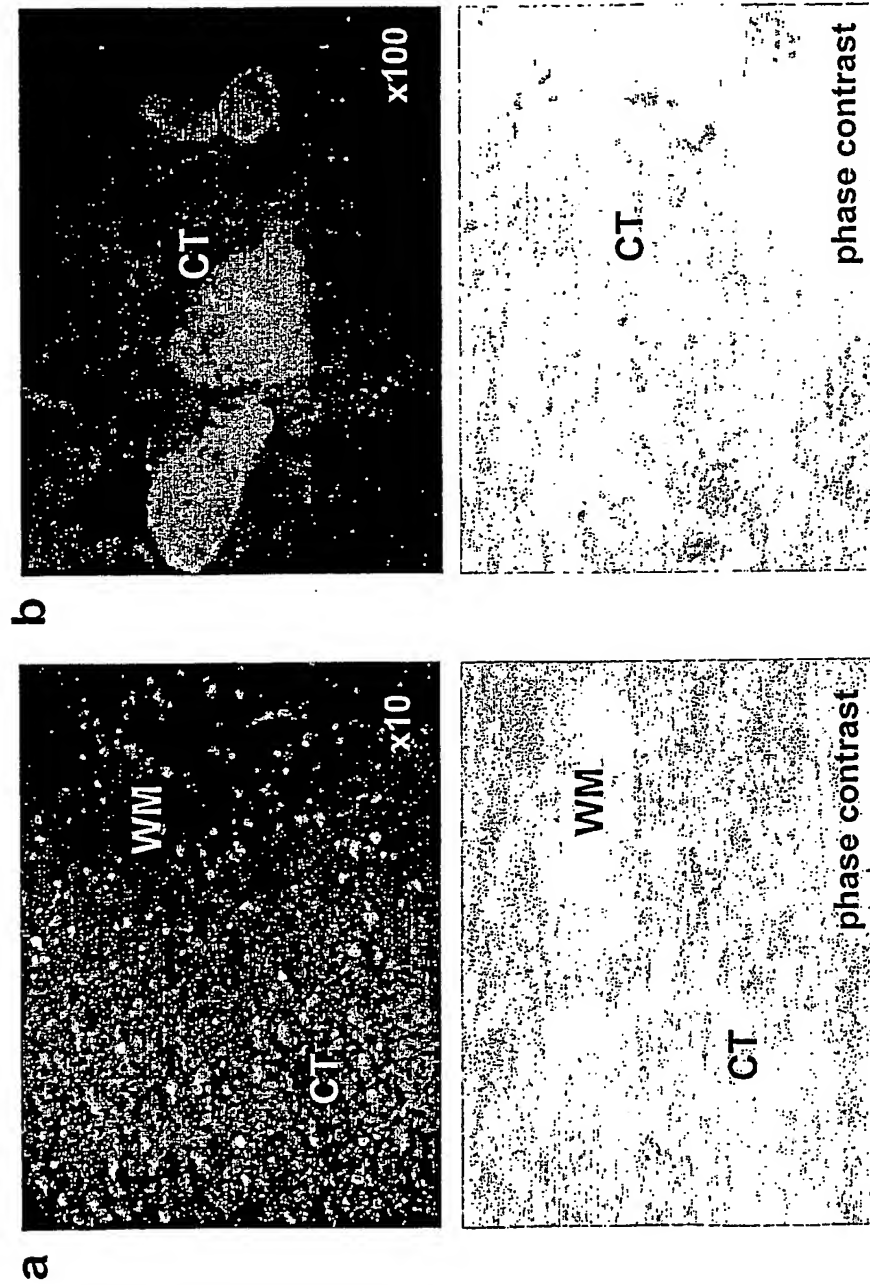
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2201 TGGCCTCAGC TATGCTTCCT GGCTCTCCCT CAAGAGTGCA GCCTTGGCTA
2251 GAGAACTCAC AGCTCTGGGA AAAAGAGGAG CAGACAGGGT TCCCTGGGCC
2301 CAGTCTCAGC CCAGCCACTG ATGCTGGATG ACCTTGGCCT GACCCTGGTC
2351 TGGTCTCAGA ATCACTTTTC CCATCTGTAA AATTGAGATG AATTTTGGTG
2401 TTGAAAGTTC TTCCTGGAGC AGATGTCCTA GAAGGTTTTA GGAATAGTGA
2451 CAGAGTCAGG CCACCCCAAG GGCCATGGGA GCCAGCTGAC CTGCTTGACC
2501 GAAGGATTTT TGACAGACTA TCTTTGGGGA TGTTTTCAAG AAGGGATATA
2551 AGTTATTTAC TTTGGGCATT TAAAAGAAAA TTTCTCTCGG GAATAATTTT
2601 ATAGAAAAAT AAAGCTTCTG TGTCTAAGGC

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Fig. 9: Images of the human cerebral cortex labeled with anti-FOAP-13 antiserum and with DAPI



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Table 1 :

sample Δ (fold)
(temporal / frontal cortex)

